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Salmon Recovery in the Columbia River Basin: Analysis of Measures Affecting Agriculture

Marine Resource Economics

Volume 14, Number 1
Spring 1999

Kingston, Rhode Island: Marine Resources Foundation.

"Salmon Recovery in the Columbia River Basin: Analysis of Measures Affecting Agriculture"

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Native salmon runs of the Columbia River basin have declined precipitously in recent decades, prompting the listing of several stocks under the Federal Endangered Species Act. This analysis examines the effects of proposed salmon recovery measures on the Northwest agricultural sector. Primary measures affecting agriculture include modified timing of dam releases, reservoir drawdown, and flow augmentation. Potential adjustments in input cost and supply include increased grain transport costs due to restricted barging along the lower Snake River; higher irrigation pumping costs with increased hydroelectric power rates; and reduced irrigation water diversions in the upper Snake River basin. Input cost and quantity changes are quantified and combined into seven recovery scenarios for analysis. Study results suggest that drawdown and/or minor reductions in irrigation diversions would reduce producers' annual profits by less than 1 percent of baseline levels. The most extreme scenario—an extended drawdown period combined with significantly reduced irrigation diversions—would reduce producers' profits by $35 million (2.5 percent) annually. That effect is magnified at the local level; of the $35 million decline in annual profits, more than $27 million occur in southern Idaho and eastern Oregon. The Federal Government would bear these costs if it acquires water via voluntary transactions.